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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/894,099	06/28/2001	Barry James Lytollis	THOM-0015	5335

7590

09/08/2003

John W. Caldwell  
WOODCOCK WASHBURN KURTZ MACKIEWICZ & NORRIS LLP  
One Liberty Place - 46th Floor  
Philadelphia, PA 19103

EXAMINER

RODRIGUEZ, ISABEL

ART UNIT

PAPER NUMBER

2836

DATE MAILED: 09/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/894,099

Applicant(s)

LYTOLLIS, BARRY J.

Examiner

Isabel Rodriguez

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 28 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☒ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3. 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Abstract***

1. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Abstract contains legal phraseology. Please remove "sensing means" because it is legal phraseology.

The word "incendive" is not part of the English vocabulary. Please substitute with "incendiary".

### ***Specification***

2. The disclosure is objected to because of the following informalities: The word "incendive" is not part of the English vocabulary. Please substitute with "incendiary".

Appropriate correction is required.

### ***Claim Objections***

3. Claims 1 and 6 are objected to because of the following informalities: The word "incendive" is not part of the English vocabulary. Please substitute with "incendiary" and please correct "the said voltage" to say "the voltage".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1,3-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Mukli et al. (US 4,638,396).

a) Regarding claims 1 and 6, Mukli et al. discloses a method and apparatus for protecting intrinsically safe circuits (fig. 1) in which a voltage is supplied via a supply circuit (12) to a load (14), which comprises sensing the voltage at the load (20) and, in the event that a decrease in the said voltage is detected, disconnecting the load (16) in such manner as to prevent any series break in the supply circuit from becoming incendive. See col. 2 lines 4-14.

b) Regarding claims 3 and 7, Mukli et al. discloses a method and apparatus according to claim 1, which comprises incorporating means to sense the voltage and means to disconnect the load into a module which includes the load with the sensing means and the switch means being on the supply side of the load. See col. 2 lines 15-18.

c) Regarding claims 4 and 10, Mukli et al. discloses a method and apparatus according to claim 3, which comprises protecting the means to disconnect the load from over-current (26). See col. 3 lines 2-7.

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d) Regarding claim 5 and 11, Mukli et al. discloses a method and apparatus according to claim 3, which comprises protecting the means to disconnect the load from overdissipation(28). See col. 3 lines 30-32.

e) Regarding claim 9, Mukli et al. discloses an apparatus according to claim 6, in which the switch means comprises a transistor switch (Q1).

f) Regarding claim 12, Mukli et al. discloses a power system for an intrinsically safe circuit, comprising power supply means (12), power distribution means (32,34) connected to the power supply means, and at least one module connected to the power distribution means, the or each module comprising an intrinsically safe circuit (14) including a load, sensing means (18) to detect the voltage supplied to the load, and switch means (16) arranged, in response to the detection by the sensing means of a decrease in the supplied voltage, to disconnect the load in such manner as to prevent any series break upstream from the switch means from becoming incendive.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mukli et al.

Mukli et al discloses an apparatus according to claim 6, in which the sensing means comprises a resistor (R13). Mukli et al. does not disclose the sensing means to be a Zener diode (CR4). In absence of persuasive evidence that a particular type of current sensor is significant, it

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would have been an obvious matter of choice to one of ordinary skill in the art to utilize any type of sensing means as long as it provide the intended function of sensing the current value . In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

8. Claims 2 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mukli et al. in view of Brooks et al. (US 6,034,611).

Mukli et al. discloses a method and apparatus according to claim 1, in which a load is fed from one or more power supplies via a power bus. Mukli does not disclose having a plurality of modules each including a load. Brooks et al. discloses a protection circuit (fig. 1a) in which a plurality of loads (28,30,32,34) are protected by a plurality of protection circuits (12,14,16,18). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Mukli et al. to include a plurality of loads because it would provide protection to a plurality of loads. Furthermore, it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. In re Japiske, 86 USPQ 70.

### ***Conclusion***

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Isabel Rodriguez whose telephone number is 703-305-4761. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 703-308-3119. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-7724 for regular communications and 703-308-7704 for After Final communications.

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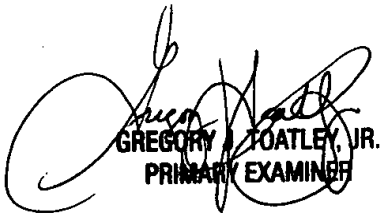
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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

IR

August 21, 2003



GREGORY A. TOATLEY, JR.  
PRIMARY EXAMINER